

selectively polling the serial port for activity based on the result of the comparison.

2. (Original) A boot method according to claim 1 wherein the polling is performed if the key value does not match the predetermined security value.
3. (Original) A boot method according to claim 1 further comprising the step of jumping to a boot location in FLASH memory to execute instructions stored therein.
4. (Original) A boot method according to claim 2 further comprising the step of downloading code into internal SRAM located in the mobile device in response to a detection of serial port activity.
5. (Original) A boot method according to claim 4 further comprising the step of executing an instruction in the downloaded code.
6. (Original) A boot method according to claim 5 further comprising the step of jumping to a boot location in FLASH memory to execute boot instructions stored therein.
7. (Original) A boot method according to claim 1 wherein the predetermined security value is stored in a BootROM located in the mobile device.
8. (Original) A boot method according to claim 1 wherein the step of reading is performed in response to a reset command.
9. (Original) An apparatus for use in a mobile device having a serial port, comprising:
  - a first internal memory means having a predetermined security value stored therein;
  - a second memory means having a security location for storing a key value; and
  - a processor in communication with the first and second memory means for comparing a key value stored in the security location to the predetermined security value,

and for selectively polling the serial port for activity based on the result of the comparison.

10. (Original) An apparatus according to claim 9 wherein the first internal memory means comprises a Boot Read Only Memory (BootROM).

11. (Original) An apparatus according to claim 9 wherein the second memory means comprises a FLASH memory.

12. (Original) An apparatus according to claim 9 further comprising a reset means in communication with the processor for initiating a reset process.

13. (Original) An apparatus according to claim 9 wherein the processor compares the key value and said predetermined security value in response to initiation of a reset process.

14. (Original) An apparatus according to claim 9 wherein the first internal memory means is located on an ASIC.

15. (Original) An apparatus according to claim 9 wherein the processor is located on an ASIC.

16. (Original) An apparatus according to claim 9 wherein the processor comprises a microcontrol unit connected to the serial port.

17. (Original) An apparatus according to claim 9 wherein the processor comprises a digital signal processor connected to the second memory means.

18. (New) A method for bootup of a computing device, the computing device comprising a serial port and internal memory comprising FLASH memory and a BootROM memory comprising BootROM code, the method comprising the steps of:

executing instructions stored in the BootROM code to read a key value from a security location in the FLASH memory, the key value being independent of the contents of FLASH memory;

executing instructions stored in the BootROM code to compare the key value to a predetermined security value stored in the BootROM memory;

on the condition that the comparison shows a match between the key value and the predetermined security value, executing instructions stored in the BootROM code to transfer execution to instructions stored in a boot location in the FLASH memory; and

on the condition that the comparison shows a mismatch between the key value and the predetermined security value,

polling the serial port for activity,

downloading new code into internal memory through the serial port in response to a detection of serial port activity, and

transferring execution to instructions in the new code.

19. (New) A program product for a computing device, the program product comprising program code embodied in a program product media, the program product comprising program code operative to carry out the steps of Claim 18.

20. (New) An apparatus for use in a mobile device having a serial port and an internal memory comprising FLASH memory and a BootROM memory comprising BootROM code, the apparatus further comprising a processor,

the BootROM code comprising instructions executable on the processor to read a key value from a security location in the FLASH memory, the key value being independent of the contents of FLASH memory;

the BootROM code further comprising instructions executable on the processor to compare the key value to a predetermined security value stored in the BootROM memory;

the BootROM code further comprising instructions executable on the processor, on the condition that the comparison shows a match between the key value and the

predetermined security value, to transfer processor execution to instructions stored in a boot location in the FLASH memory; and

the BootROM code further comprising instructions executable on the processor, on the condition that the comparison shows a mismatch between the key value and the predetermined security value, to

poll the serial port for activity,

download new code into internal memory through the serial port in response to a detection of serial port activity, and

transfer processor execution to instructions in the new code.